1. Medium and long-term strategy
2. Medium-term management plan 2019
1. Medium and long-term strategy
1. Medium and long-term strategy

① Market environment and Our business area

Trends of Automotive PWB market:

- **Social environment**
  - Economic growth of emerging countries
  - Strengthening of fuel efficiency regulation
  - Shortage of workers and Aging society
  - Strong demand for comfortability
  - Widespread adoption of 5G

- **Technology innovation etc.**

- **Automotive industry**
  - Increase of global production volume
  - Electric motorization (HV/PHV/EV)
  - ADAS (Advanced Driving Assistance System)
  - Autonomous driving
  - Connected car

- **Semiconductor**
  - High integration, Multi-core
  - Low power
  - Expansion of program capacity

- **PWB**
  - Demand increasing and functionality improved
  - Use of HDI PWBs expanding

Source: prepared by CMK reference to Fuji Chimera Research
[Comprehensive Study of In-Vehicle Electronics Devices and components 2019]

Growing demand for HDI PWBs driven by the trend of high functionality and compact sized unit
1. Medium and long-term strategy

①-2 Market environment and Our business area

Business area with competitive advantage in the application of automotive products:

- Advantages in the application requiring high quality and reliability

- Required quality - reliability

- Body Electronics Climate Control
- Information and Communication

- Single-sided Double-sided Multilayered HDI

- Powertrain Driving control and Safety

- Required products:
  - Engine Management System
  - HV/EV ECU
  - Battery
  - Power Control Unit
  - Electric Variable Cam Timing etc.

- Driving control and Safety
  - Image sensor
  - Millimeter-wave Radar
  - LiDAR
  - Driver Support System
  - Brake etc.

- Value-added Products
  - Head-Up Display
  - Mirror Control
  - Power seat etc.
  - Driver Status Monitor
  - Communication module for automotive use etc.
1. Medium and long-term strategy

①-3 Market environment and Our business area

Trends of Powertrain and Driving control and Safety sector:

<table>
<thead>
<tr>
<th>Powertrain</th>
<th>Driving control and Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening of fuel efficiency regulation</td>
<td>Safety measure</td>
</tr>
<tr>
<td>Fuel efficiency improvement</td>
<td>Autonomous driving</td>
</tr>
<tr>
<td>xEV</td>
<td>ADAS</td>
</tr>
<tr>
<td>High power inverter</td>
<td>Millimeter-wave Radar</td>
</tr>
<tr>
<td>Hybrid Control System</td>
<td>Camera</td>
</tr>
<tr>
<td>Battery monitoring</td>
<td>Integrated vehicle control system</td>
</tr>
<tr>
<td>Cooling System</td>
<td>Brake Control</td>
</tr>
<tr>
<td>Electronic Control</td>
<td>Steering Control</td>
</tr>
<tr>
<td>Idle reduction</td>
<td>Various sensors</td>
</tr>
<tr>
<td>Various sensors</td>
<td>ADAS</td>
</tr>
<tr>
<td>High power</td>
<td>Heat-resistant・Heat dissipation</td>
</tr>
<tr>
<td>Large capacity</td>
<td>Large current</td>
</tr>
<tr>
<td>Increased devices</td>
<td>Compact sizing</td>
</tr>
<tr>
<td>Change in the installation position from dashboard to engine room and/or directly mount to engine (installation position secured)</td>
<td>High-speed processing</td>
</tr>
<tr>
<td>Real time processing</td>
<td>Automatic control</td>
</tr>
<tr>
<td>Collaboration control</td>
<td>High-speed communication Widespread adoption of 5G</td>
</tr>
</tbody>
</table>

▶ Higher quality and reliability required
▶ High specification required ～Market expanding～
1. Medium and long-term strategy

①-4 Market environment and Our business area

Our new target business sectors:

- Mobile phone
- PC
- Consumer electronics
- AV
- OA
- Medical equipment
- Aerospace
- Infrastructure
- Industrial equipment
- Automobile

Red underlined words denote the sectors likely to have a direct impact on human lives.

▶ Other business sectors, in addition to the automobile sector, where our high quality and reliability with competitive advantage are required (Expand our business in a new market expected to grow by the widespread adoption of 5G in the new business sectors).
1. Medium and long-term strategy

② Outline of the Medium and Long-term strategy

Market environment

- PWB market is growing, mainly supported by Mobile communications and **products for automotive use**
- With the widespread adoption of electrification, automated driving and 5G, further **increase in demand and requirements for quality and reliability are expected**
- The **industrial equipment sector and Medical equipment sector** are regarded as a market likely to grow in the future, where superior quality and reliability are required similarly to the automotive sector

Advantages of CMK

- The share of **products for Powertrain and Driving control and Safety is just below 50% of the sales of automotive products**
- **The global share of HDI PWBs** for automotive use is approximately 40% (CMK’s assumption)
- **Product analysis capability and Quick response according to customer’s request** based on our technology and experience we have acquired over many years.
- **Long-term supply and Quality assurance system** based on stable financial base.
- **Sharing of roadmaps** with major automobile parts manufactures

Select and focus on the sectors where we can make use of our company’s great advantages

Focusing on the key business sectors, select targets based on applications and PWB types

Achieving growth in the area of high-value-added products, mainly focusing on the automotive product market
1. Medium and long-term strategy

③ Vision and Strategy

Vision

“Changing our business structure to promote customer satisfaction and create more rewarding working environment”

Aiming at becoming a leading global company in a niche business specialized in highly reliable PWBs and providing ‘the highest level of reliable products’ in the market, we will meet stakeholders’ expectations and deliver the welfare and growth of our employees.

2019～2021

Priority measures

‘Shift to highly-added value’ ‘A Smart Factory initiative’ ‘M&A and Alliance’

Medium-term management plan 2019

~Laying a solid foundation for real growth in the next medium term management plan~

‘30 billion yen capital investment’ ‘Company Restructuring’ ‘Company quality improvement’

2022～

Next・Medium-term management plan

~Stage for real growth based on our strength of total quality~

Establish the basis of our further growth, M&A and Alliance
### 1. Medium and long-term strategy

#### ④ Priority measures

**Three key objectives to deliver our medium and long-term vision**

**Shift to highly-added value**

- Shift current orders toward products with highly-added value mainly in the automotive sector and establish a new foundation for further growth
  - Review our portfolio (Productivity enhancement) to achieve the shift of orders and optimize production system
  - Develop and establish market sectors other than automotive PWBs to make use of our advantages
  - Enhance research and development which support our strategy related to products with highly-added value

**A Smart Factory initiative**

- Realize a smart factory by making maximum use of IoT and AI
  - Improve production efficiency
  - Streamline key processes by utilizing AI (Use of AI in visual inspection equipment)
  - Realize a factory where IoT foretells problems with facilities, avoiding operation shut-down

**M&A and Alliance**

- Achieve accelerating growth through M&A and Alliance
  - Departing from our self-sufficient business, aim at growing globally with a sense of speed
  - Enhance cost competitiveness by making use of OEM
  - Expand customer basis by adopting the related technology (Expansion of PWB mounting business)
1. Medium and long-term strategy

④ Numerical Management Targets

Targeting 10% or more operating profit margin through three key objectives

- **Shift to highly-added value**
  - Improve our product mix
  - Promote our competitive advantage
  - Establish new sectors (Industrial, medical, 5G etc.)

- **A smart factory initiative**
  - Improve production efficiency
  - Enhance cost competitiveness

- **M&A and Alliance**
  - Acquire new customers
  - Expand production capacity
  - Enhance cost competitiveness

Operating margin (Our Target)

- 2021: 8%
- 2025: Above 10%
2. Medium-term management plan 2019
2. Medium-term management plan 2019

① Management policy

Enhancing **profitability and capital efficiency** by focusing on the area of high-value-added products mainly in the automotive product market where we can make use of our advantages.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (Billions of yen)</th>
<th>Operating Income (Billions of yen)</th>
<th>Operating Margin (%)</th>
<th>ROE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2017</td>
<td>86.8</td>
<td>4.2</td>
<td>4.9%</td>
<td>7.2%</td>
</tr>
<tr>
<td>FY2018</td>
<td>90.2</td>
<td>3.7</td>
<td>4.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>FY2019</td>
<td>94.0</td>
<td>4.0</td>
<td>4.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>FY2021</td>
<td>100</td>
<td>8.0</td>
<td><strong>8.0%</strong></td>
<td><strong>10.0%</strong></td>
</tr>
</tbody>
</table>

(Billions of yen)
Three key objectives to deliver our medium-term management plan

1. Product capacity enhancement and Productivity enhancement
2. Structural reform of business processes in Sales, Manufacturing, Procurement and HR to enhance profitability
3. Promote ESG and maintain and enhance the financial soundness

30 billion yen capital investment

Company restructuring

Company quality improvement
2. Medium-term management plan 2019

3. Priority measures ~ Summary of capital investment ~

30 billion yen capital investment (Production facilities, System, R&D)

- **Production facilities:**
  - About 27.0 billion yen
    - Take orders of products with highly-added value by enhancing production capacity
    - Improve product quality and guaranteed quality and reduce costs through the investment into automatization and productivity enhancement

- **System:**
  - About 1.5 billion yen
    - Improve guaranteed quality by the capital investment making use of IoT
    - Invest into ordering/production management systems and IT infrastructure to make business process reforms

- **R&D:**
  - About 1.5 billion yen
    - Invest into research and development to deliver the shift toward highly-added value
Company-wide restructuring to enhance profitability

- **Sales reform**: Optimally allocate marketing function globally
- **Production reform**: Reform business processes from receiving orders to production and shipment
- **Procurement reform**: Enhance the global procurement system
- **HR reform**: Establish HR system

Improving profitability and capital efficiency through effective structural and business reforms
Promoting ESG

**Environment**
- Carbon-Dioxide emission reduction
- Water consumption reduction
- Resource recycling
- Renewal with energy-saving etc.

**Society**
- Diversity and inclusion
- Promotion of work-life balance etc.

**Governance**
- Enhancement of group management
- Extend checking functions of the Board of Directors
- Improve and increase the contents of information disclosed in English etc.

**Reporting our activity in ‘CMK Report’**

We have renewed the existing ‘CSR report’ so that we can report on our various activities related to ESG continually and in an easy-to-understand way.

⇒ We will evaluate activity themes and the progress status every year.

〜Examples of our activities〜
- Social contributions activities (Thai factory) participated in the Environmental Good Governance (organized by Department of Industrial Works, Ministry of Industry of Thailand Government) for the activities such as releasing of young fish into local rivers and donations to public facilities
- Implemented Industrial Training and Technical Internship Program (Niigata factory)

Carrying forward the management focused on ESG to enhance the value of our company over a long period.
2. Medium-term management plan 2019

⑥ Priority measures～Company quality improvement～

Maintaining and enhancing the financial soundness

Cash flow management in view of the capital efficiency

- Profit attributable to owners of parent 13.0 billion yen
- Depreciation cost 16.0 billion yen
- Efficient funding

Enhance the financial soundness for further growth
Improve the equity ratio

Operating cash flow 29.0 billion yen + α

Shareholder return
Capital investment 30.0 billion yen

Enhance the financial soundness for further growth

<table>
<thead>
<tr>
<th>Year</th>
<th>FY2017 (Results)</th>
<th>FY2018 (Results)</th>
<th>FY2019 (Prospect)</th>
<th>FY2020 (Plan)</th>
<th>FY2021 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity ratio (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Targeting operating margin at 8% in the final fiscal year

<table>
<thead>
<tr>
<th></th>
<th>Results FY2018</th>
<th>Medium-term management plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net sales</strong></td>
<td>90.2</td>
<td>94.0 97.0 100</td>
</tr>
<tr>
<td><strong>Operating income</strong></td>
<td>3.7</td>
<td>4.0 5.5 8.0</td>
</tr>
<tr>
<td><strong>Operating margin</strong></td>
<td>4.2%</td>
<td>4.3% 5.7% 8.0%</td>
</tr>
<tr>
<td><strong>Profit attributable to owners of parent</strong></td>
<td>2.0</td>
<td>2.7 4.2 6.0</td>
</tr>
<tr>
<td><strong>Exchange rate (USD/JPY)</strong></td>
<td>110.37</td>
<td>110.00 110.00 110.00</td>
</tr>
</tbody>
</table>
2. Medium-term management plan 2019

Sales by application

(Billions of yen)

<table>
<thead>
<tr>
<th>Category</th>
<th>FY2018 (Results)</th>
<th>FY2021 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>21.1</td>
<td>16.5</td>
</tr>
<tr>
<td>Car electronics</td>
<td>69.1</td>
<td>82.5</td>
</tr>
<tr>
<td>Others</td>
<td>21.1</td>
<td>16.5</td>
</tr>
</tbody>
</table>

New business sector 1.0

<table>
<thead>
<tr>
<th>Category</th>
<th>FY2018 (Results)</th>
<th>FY2021 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powertrain・Driving control and Safety</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Information and Communication</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Body electronics・Climate Control, others</td>
<td>33%</td>
<td></td>
</tr>
</tbody>
</table>

38.0

Powertrain・Driving control and Safety

30.4

Car electronics

69.1

Breakdown of products for automotive use

<table>
<thead>
<tr>
<th>Category</th>
<th>FY2018 (Results)</th>
<th>FY2021 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body electronics・Climate Control, others</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Information and Communication</td>
<td>22%</td>
<td></td>
</tr>
</tbody>
</table>
Planning 8.0 billion yen operating profit in the final fiscal year, helped by a 4.3 billion yen increase in profit from FY2018.

Profit increase due to sales growth: 2.1 billion yen
Improved manufacturing yield and increased productivity: 1.5 billion yen
Decreased sales prices and increased procurement cost etc.: 0.9 billion yen
Cost reduction by company restructuring: 8.0 billion yen

FY2018 Operating income (Results): 3.7 billion yen
FY2021 Operating income (Plan): 8.0 billion yen
2. Medium-term management plan 2019

8. Technology roadmaps

We will progress our developments in the fields high quality and high reliability required.

<table>
<thead>
<tr>
<th>Application for automotive use</th>
<th>Main products</th>
<th>PWB requirement</th>
<th>2019</th>
<th>2020</th>
<th>After 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powertrain</td>
<td>Inverter</td>
<td>Down sizing</td>
<td>Mass-production</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heavy copper</td>
<td>Mass-production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millimeter-wave Radar</td>
<td>HDI</td>
<td>Under Mass-production</td>
<td>Trial</td>
<td>Mass-production</td>
<td></td>
</tr>
<tr>
<td>ADAS</td>
<td>MSAP</td>
<td>Development</td>
<td>Mass-production</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thick RF PWB</td>
<td>Trial</td>
<td>Mass-production</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thin PWB</td>
<td>Trial</td>
<td>Mass-production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information and communication</td>
<td>Fine pattern</td>
<td>Trial</td>
<td>Mass-production</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copper based</td>
<td>Under Mass-production</td>
<td>Trial</td>
<td>Mass-production</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine pattern</td>
<td>Mass-production</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Market needs

- Down-sized unit
- Reliability of high withstand voltage (EV has higher voltage than 10x voltage for gasoline vehicle)
- High heat-resistance performance (More than 1.5x conductive reliabilities of consumer products)
- High current PWB for PHV or EV

- Requests of more down-sizing and more accuracy improvement
- Thick RF PWB for higher stiffness
- Higher reliability of thin PWB for automotive use
- PWB combined higher density and higher stiffness
- Requests of higher heat radiation
- Requests of more down-sizing and more accuracy improvement

※RF means Rigid flexible PWB
Future-related information and descriptions in this material are just forward-looking statements and not guarantees for future achievements.

(Amounts are rounded, and % is rounded to one decimal place.)

END